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tat gtc ggg cgc tgg tgg aac ttc atc gag ccg tcg caa tgg ccc ccg	1008

Tyr	Val	Gly	Arg	Trp	Trp	Asn	Phe	Ile	Glu	Pro	Ser	Gln	Trp	Pro	Arg		
				325					330					335			
gac	gaa	tac	cgg	ctg	cag	ggc	atc	agg	gcc	aaa	tgg	gac	agc	gtg	gtc		1056
Asp	Glu	Tyr	Arg	Leu	Gln	Gly	Ile	Arg	Ala	Lys	Trp	Asp	Ser	Val	Val		
			340					345					350				
ggc	gac	tgc	cgg	cag	gag	ttg	gtg	ttt	atc	ggc	cag	ggc	ctc	gac	acc		1104
Gly	Asp	Cys	Arg	Gln	Glu	Leu	Val	Phe	Ile	Gly	Gln	Gly	Leu	Asp	Thr		
		355					360					365					
gac	gcg	tta	cag	cgc	gag	ctc	gac	cac	tgc	ctg	ctg	agc	gcc	cag	gaa		1152
Asp	Ala	Leu	Gln	Arg	Glu	Leu	Asp	His	Cys	Leu	Leu	Ser	Ala	Gln	Glu		
	370					375					380						
atc	gcc	gcc	ggc	cca	ctg	gcc	tgg	caa	gcg	ctg	cca	ggg	gcg	acc	gcc		1200
Ile	Ala	Ala	Gly	Pro	Leu	Ala	Trp	Gln	Ala	Leu	Pro	Gly	Ala	Thr	Ala		
385					390					395					400		
ttt	gac	cga	cag	acc	ctt	gcc	cgc	ccc	cca	cac	agc	cca	tgg	cga	ttg		1248
Phe	Asp	Arg	Gln	Thr	Leu	Ala	Arg	Pro	Pro	His	Ser	Pro	Trp	Arg	Leu		
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ccc	cca	ttt	gat	ccg	aga	tag											1269
Pro	Pro	Phe	Asp	Pro	Arg												
			420														

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Gly	Phe	Leu	Gly	Ala	Gly	Lys	Thr	Thr	Leu	Leu	Asn	His	Ile	Leu	Arg		
		20					25						30				
Asn	Arg	Glu	Gly	Leu	Arg	Val	Ala	Val	Ile	Val	Asn	Asp	Met	Ser	Glu		
		35					40					45					
Val	Asn	Ile	Asp	Ala	Glu	Glu	Val	Gln	Arg	Asp	Val	Ala	Leu	His	Arg		
	50					55					60						
Gly	Arg	Asp	Glu	Leu	Ile	Glu	Met	Ser	Asn	Gly	Cys	Ile	Cys	Cys	Thr		
65				70						75					80		
Leu	Arg	Ala	Asp	Leu	Leu	Glu	Gln	Ile	Ser	Met	Leu	Ala	Arg	Gln	Gln		
			85						90					95			
Arg	Phe	Asp	Tyr	Leu	Leu	Ile	Glu	Ser	Thr	Gly	Ile	Ser	Glu	Pro	Met		

100					105					110					
Pro	Val	Ala	Glu	Thr	Phe	Ala	Phe	Leu	Asp	Ala	Asp	Gly	Phe	Ser	Leu
	115						120					125			
Ser	Glu	Leu	Ala	Arg	Leu	Asp	Thr	Leu	Val	Thr	Val	Val	Asp	Gly	Ser
	130					135					140				
Arg	Phe	Gln	Glu	Leu	Leu	Glu	Ser	Pro	His	Thr	Val	Asp	Gln	Asp	Asp
145					150					155					160
Ala	Thr	Pro	Asp	Ala	Pro	Lys	Arg	His	Leu	Ala	Asp	Leu	Leu	Ile	Glu
				165					170					175	
Gln	Val	Glu	Tyr	Ala	Asn	Val	Ile	Leu	Val	Asn	Lys	Leu	Asp	Leu	Ile
			180					185					190		
Asp	Ala	Ala	Gln	Tyr	Gln	Ala	Val	Gln	Ala	Ile	Leu	Thr	Gly	Leu	Asn
		195					200					205			
Pro	Thr	Ala	Arg	Ile	Met	Pro	Met	Ala	His	Gly	Asn	Ile	Pro	Ser	Ala
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Ser	Leu	Leu	Gly	Thr	His	Leu	Phe	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Ser
225					230					235					240
Pro	Gly	Trp	Met	Arg	Lys	Met	Glu	Ala	Ala	Asp	Ala	Pro	Ala	Ser	Glu
				245					250					255	
Ser	Asp	Thr	Tyr	Gly	Val	Thr	Ser	Trp	Val	Tyr	Arg	Glu	Arg	Ala	Pro
			260					265					270		
Phe	His	Pro	Gln	Arg	Leu	Leu	Asp	Phe	Leu	Gln	Gln	Pro	Trp	Cys	Asn
		275					280					285			
Gly	Arg	Leu	Leu	Arg	Ser	Lys	Gly	Tyr	Phe	Trp	Leu	Ala	Ser	Arg	His
	290					295					300				
Leu	Glu	Thr	Gly	Leu	Leu	Val	Gln	Ser	Gly	Lys	Arg	Phe	Gln	Trp	Asp
305					310					315					320
Tyr	Val	Gly	Arg	Trp	Trp	Asn	Phe	Ile	Glu	Pro	Ser	Gln	Trp	Pro	Arg
				325					330					335	
Asp	Glu	Tyr	Arg	Leu	Gln	Gly	Ile	Arg	Ala	Lys	Trp	Asp	Ser	Val	Val

	340		345		350	
Gly Asp Cys Arg Gln Glu Leu Val Phe Ile Gly Gln Gly Leu Asp Thr						
	355		360		365	
Asp Ala Leu Gln Arg Glu Leu Asp His Cys Leu Leu Ser Ala Gln Glu						
	370		375		380	
Ile Ala Ala Gly Pro Leu Ala Trp Gln Ala Leu Pro Gly Ala Thr Ala						
	385		390		395	400
Phe Asp Arg Gln Thr Leu Ala Arg Pro Pro His Ser Pro Trp Arg Leu						
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Pro Pro Phe Asp Pro Arg						
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gtg ctc aag cgc aaa gac ctc atc ccc gag ggc tac atc gaa cag ctc						96
Val Leu Lys Arg Lys Asp Leu Ile Pro Glu Gly Tyr Ile Glu Gln Leu						
	20		25		30	
acc cag ctg atg gaa cac ggc tgg agc ccg gaa aac ggc gcg cgc atc						144
Thr Gln Leu Met Glu His Gly Trp Ser Pro Glu Asn Gly Ala Arg Ile						
	35		40		45	
gtc gcc aag gcc tgg gtc gat ccg cag ttt cgc gag ctg ctg ctc aag						192
Val Ala Lys Ala Trp Val Asp Pro Gln Phe Arg Glu Leu Leu Leu Lys						
	50		55		60	
gac ggt acg gcc gcc tgc gcc cag ttc ggc ttc acc ggc cca caa ggc						240
Asp Gly Thr Ala Ala Cys Ala Gln Phe Gly Phe Thr Gly Pro Gln Gly						

65	70	75	80	
gaa tac atc gtc gcc ctg gaa gac acc ccg cag ttg aaa aac gtg atc				288
Glu Tyr Ile Val Ala Leu Glu Asp Thr Pro Gln Leu Lys Asn Val Ile	85	90	95	
gtc tgt agc ctg tgc tcc tgc acg aac tgg ccg gtg ctg ggc ctg cca				336
Val Cys Ser Leu Cys Ser Cys Thr Asn Trp Pro Val Leu Gly Leu Pro	100	105	110	
cct gag tgg tac aag ggc ttc gag ttc cgt gcg cgg ttg gtc cgg gag				384
Pro Glu Trp Tyr Lys Gly Phe Glu Phe Arg Ala Arg Leu Val Arg Glu	115	120	125	
ggg cgc acg gta ttg cgc gag ctg ggc acc gag ttg ccc ggc gac atg				432
Gly Arg Thr Val Leu Arg Glu Leu Gly Thr Glu Leu Pro Gly Asp Met	130	135	140	
gtg gtc aag gtc tgg gac acc agc gct gaa agc cgc tac ctg gtg ctg				480
Val Val Lys Val Trp Asp Thr Ser Ala Glu Ser Arg Tyr Leu Val Leu	145	150	155	160
ccg caa cga cca gcg ggc tca gag cat atg agc gaa gag cag ttg cgg				528
Pro Gln Arg Pro Ala Gly Ser Glu His Met Ser Glu Glu Gln Leu Arg	165	170	175	
caa ctg gtc acc aag gac gtg ctg atc ggc gtc gcc ctg ccc cgc gtt				576
Gln Leu Val Thr Lys Asp Val Leu Ile Gly Val Ala Leu Pro Arg Val	180	185	190	
ggc tga gcaaggccgc ccaaccccat tcaacttccg gagtggttcaa t atg gat ggc				632
Gly			Met Asp Gly	195
ttt cac gat ctc ggc ggt ttc cag ggc ttt ggc aaa gtg ccc cac cgc				680
Phe His Asp Leu Gly Gly Phe Gln Gly Phe Gly Lys Val Pro His Arg	200	205	210	
atc aac agc ctg agc tac aag cag gtg ttc aag cag gac tgg gaa cac				728
Ile Asn Ser Leu Ser Tyr Lys Gln Val Phe Lys Gln Asp Trp Glu His	215	220	225	
ctg gcc tac agc ctg atg ttc atc ggc gtc gac cac ctg aac aag ttc				776
Leu Ala Tyr Ser Leu Met Phe Ile Gly Val Asp His Leu Asn Lys Phe	230	235	240	
agc gtc gac gaa ata cgt cat gcc gtc gaa cgc att gac gtg cgc cag				824
Ser Val Asp Glu Ile Arg His Ala Val Glu Arg Ile Asp Val Arg Gln	245	250	255	260
cac gtc ggc acc gaa tac tac gaa cgt tat gtg atc gcc act gcc acg				872
His Val Gly Thr Glu Tyr Tyr Glu Arg Tyr Val Ile Ala Thr Ala Thr	265	270	275	
ctg ctg gtc gaa aca ggc gtc atc acc cag gcc gaa ctg gat gaa gca				920
Leu Leu Val Glu Thr Gly Val Ile Thr Gln Ala Glu Leu Asp Glu Ala	280	285	290	
ctc ggc tcg cac ttc aag ctg gcc aac ccc gcc cat gcg caa ggg cgt				968
Leu Gly Ser His Phe Lys Leu Ala Asn Pro Ala His Ala Gln Gly Arg	295	300	305	

gct gca att atc ggg cga gcg cct ttt gaa gtg ggc gat cgg gtc atc Ala Ala Ile Ile Gly Arg Ala Pro Phe Glu Val Gly Asp Arg Val Ile 310 315 320	1016
gta cgc gat gaa tac gtg gcc ggg cat gtg cgc atg cct gca tac gtg Val Arg Asp Glu Tyr Val Ala Gly His Val Arg Met Pro Ala Tyr Val 325 330 335 340	1064
cgc ggc aag caa ggc gta gtg ctg cac cgg acc act gaa cag tgg ccg Arg Gly Lys Gln Gly Val Val Leu His Arg Thr Thr Glu Gln Trp Pro 345 350 355	1112
ttt ccg gac gcg att ggc cat ggc gac cag agc gct gcg cat caa ccg Phe Pro Asp Ala Ile Gly His Gly Asp Gln Ser Ala Ala His Gln Pro 360 365 370	1160
acc tac cat gtc gag ttc cgc gtg cgg gac ctg tgg ggc gat gcc gca Thr Tyr His Val Glu Phe Arg Val Arg Asp Leu Trp Gly Asp Ala Ala 375 380 385	1208
gac gac ggc ctg gtg gtg gta gac ctg ttc gaa agc tat ctg gac agg Asp Asp Gly Leu Val Val Val Asp Leu Phe Glu Ser Tyr Leu Asp Arg 390 395 400	1256
gtc gaa agc ccg cga gtg gtg cgc gca tga gtgccggcgcc ccaggcaggc Val Glu Ser Pro Arg Val Val Arg Ala 405 410	1306
cggtctgccgg tgacggctct ttcaggcttc ctggcgccag gcaagaccac cctgctcaac	1366
cacatcctgc gcaaccgccca gggcctgaag gtggcggtta tcgtcaatga catgagcgag	1426
gtcaacatcg atgccgccca ggtccagcgc gacgttgccg tgtatcgtgg ccaggatgaa	1486
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atcagcgccg tggcgcgcca gcagcgtttc gattacctgt tgatcgagtc caccgggatt	1606
tccgagccga tgccagtcgc cgagaccttt gcctttctcg acgccaacgg tttcagcctc	1666
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ccgctggccg atctgctgat cgagcaggtc gagtatgccca atgtgattct ggtcaacaaa	1846
cgcgacctgg tcgacgaggc gcagtaccag gccctgcagg cagttctcgc cgggctcaat	1906
ccaggcgcac agatcctgcc gatggtggcc ggcaacgtcg ccctgtcgag cgtccttggt	1966
accagctgt tcgatttgcc cagccttgcc gcagcgcccc gctggatgaa acagatggac	2026
gcgcacgaca ccccgccgg cgagtcgcag acctatggcg tgacgtcatg ggtgtaccga	2086
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ggccgtcttc tgcgcgagcaa aggttatctt tggcttgcca gccgccaccg cgaaatcggc	2206

ttgctggtac acagcggcca gcagtttcaa tgggactatg ttggccattg gtggaacttc 2266
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Thr Gln Leu Met Glu His Gly Trp Ser Pro Glu Asn Gly Ala Arg Ile
 35 40 45

Val Ala Lys Ala Trp Val Asp Pro Gln Phe Arg Glu Leu Leu Leu Lys
 50 55 60

Asp Gly Thr Ala Ala Cys Ala Gln Phe Gly Phe Thr Gly Pro Gln Gly
 65 70 75 80

Glu Tyr Ile Val Ala Leu Glu Asp Thr Pro Gln Leu Lys Asn Val Ile
 85 90 95

Val Cys Ser Leu Cys Ser Cys Thr Asn Trp Pro Val Leu Gly Leu Pro
 100 105 110

Pro Glu Trp Tyr Lys Gly Phe Glu Phe Arg Ala Arg Leu Val Arg Glu
 115 120 125

Gly Arg Thr Val Leu Arg Glu Leu Gly Thr Glu Leu Pro Gly Asp Met
 130 135 140

Val Val Lys Val Trp Asp Thr Ser Ala Glu Ser Arg Tyr Leu Val Leu
 145 150 155 160

Pro Gln Arg Pro Ala Gly Ser Glu His Met Ser Glu Glu Gln Leu Arg
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Gln Leu Val Thr Lys Asp Val Leu Ile Gly Val Ala Leu Pro Arg Val
 180 185 190

Gly

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Trp Glu His Leu Ala Tyr Ser Leu Met Phe Ile Gly Val Asp His Leu
35 40 45

Asn Lys Phe Ser Val Asp Glu Ile Arg His Ala Val Glu Arg Ile Asp
50 55 60

Val Arg Gln His Val Gly Thr Glu Tyr Tyr Glu Arg Tyr Val Ile Ala
65 70 75 80

Thr Ala Thr Leu Leu Val Glu Thr Gly Val Ile Thr Gln Ala Glu Leu
85 90 95

Asp Glu Ala Leu Gly Ser His Phe Lys Leu Ala Asn Pro Ala His Ala
100 105 110

Gln Gly Arg Ala Ala Ile Ile Gly Arg Ala Pro Phe Glu Val Gly Asp
115 120 125

Arg Val Ile Val Arg Asp Glu Tyr Val Ala Gly His Val Arg Met Pro
130 135 140

Ala Tyr Val Arg Gly Lys Gln Gly Val Val Leu His Arg Thr Thr Glu
145 150 155 160

Gln Trp Pro Phe Pro Asp Ala Ile Gly His Gly Asp Gln Ser Ala Ala
165 170 175

His Gln Pro Thr Tyr His Val Glu Phe Arg Val Arg Asp Leu Trp Gly
180 185 190

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 195 200 205

Leu Asp Arg Val Glu Ser Pro Arg Val Val Arg Ala
 210 215 220

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 Gly Phe Leu Gly Ala Gly Lys Thr Thr Leu Leu Asn His Ile Leu Arg
 20 25 30
 aac cgc cag ggc ctg aag gtg gcg gtt atc gtc aat gac atg agc gag 144
 Asn Arg Gln Gly Leu Lys Val Ala Val Ile Val Asn Asp Met Ser Glu
 35 40 45
 gtc aac atc gat gcc gcc cag gtc cag cgc gac gtt gcg ctg tat cgt 192
 Val Asn Ile Asp Ala Ala Gln Val Gln Arg Asp Val Ala Leu Tyr Arg
 50 55 60
 ggc cag gat gaa ttg ata gag atg agc aac ggc tgt atc tgc tgc acc 240
 Gly Gln Asp Glu Leu Ile Glu Met Ser Asn Gly Cys Ile Cys Cys Thr
 65 70 75 80
 ctg cgc gcc gac ctg ctt gag cag atc agc gcg ctg gcg cgc cag cag 288
 Leu Arg Ala Asp Leu Leu Glu Gln Ile Ser Ala Leu Ala Arg Gln Gln
 85 90 95
 cgt ttc gat tac ctg ttg atc gag tcc acc ggg att tcc gag ccg atg 336
 Arg Phe Asp Tyr Leu Leu Ile Glu Ser Thr Gly Ile Ser Glu Pro Met
 100 105 110
 cca gtc gcc gag acc ttt gcc ttt ctc gac gcc aac ggt ttc agc ctc 384
 Pro Val Ala Glu Thr Phe Ala Phe Leu Asp Ala Asn Gly Phe Ser Leu
 115 120 125
 agc gaa ctg gcg cgg ctg gat acg ctg gtg acg gtg gtc gat gcc agc 432
 Ser Glu Leu Ala Arg Leu Asp Thr Leu Val Thr Val Val Asp Ala Ser
 130 135 140
 cag ttc atg gcc atg ctc gac tct ccc gaa acc gtc gcg cgg gcc gac 480
 Gln Phe Met Ala Met Leu Asp Ser Pro Glu Thr Val Ala Arg Ala Asp
 145 150 155 160
 gtc acc acg gat gac agc agg cgc ccg ctg gcc gat ctg ctg atc gag 528

Val Thr Thr Asp Asp Ser Arg Arg Pro Leu Ala Asp Leu Leu Ile Glu	
165 170 175	
cag gtc gag tat gcc aat gtg att ctg gtc aac aaa cgc gac ctg gtc	576
Gln Val Glu Tyr Ala Asn Val Ile Leu Val Asn Lys Arg Asp Leu Val	
180 185 190	
gac gag gcg cag tac cag gcc ctg cag gca gtt ctc gcc ggg ctc aat	624
Asp Glu Ala Gln Tyr Gln Ala Leu Gln Ala Val Leu Ala Gly Leu Asn	
195 200 205	
cca ggc gca cag atc ctg ccg atg gtg gcc ggc aac gtc gcc ctg tcg	672
Pro Gly Ala Gln Ile Leu Pro Met Val Ala Gly Asn Val Ala Leu Ser	
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agc gtc ctt ggt acc cag ctg ttc gat ttg ccc agc ctt gcc gca gcg	720
Ser Val Leu Gly Thr Gln Leu Phe Asp Leu Pro Ser Leu Ala Ala Ala	
225 230 235 240	
ccc ggc tgg atg aaa cag atg gac gcg cac gac acc ccg gcc ggc gag	768
Pro Gly Trp Met Lys Gln Met Asp Ala His Asp Thr Pro Ala Gly Glu	
245 250 255	
tcg cag acc tat ggc gtg acg tca tgg gtg tac cga gcg cgc gcc ccg	816
Ser Gln Thr Tyr Gly Val Thr Ser Trp Val Tyr Arg Ala Arg Ala Pro	
260 265 270	
ttc cat ccg caa cgc ttg ctt gat ttt ctc gcc cgg ccc tgg cgc gac	864
Phe His Pro Gln Arg Leu Leu Asp Phe Leu Ala Arg Pro Trp Arg Asp	
275 280 285	
ggc cgt ctt ctg cgc agc aaa ggt tat ttc tgg ctt gcc agc cgc cac	912
Gly Arg Leu Leu Arg Ser Lys Gly Tyr Phe Trp Leu Ala Ser Arg His	
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cgc gaa atc ggc ttg ctg gta cac agc ggc cag cag ttt caa tgg gac	960
Arg Glu Ile Gly Leu Leu Val His Ser Gly Gln Gln Phe Gln Trp Asp	
305 310 315 320	
tat gtt ggc cat tgg tgg aac ttc atc gac acg tca cag tgg cca cag	1008
Tyr Val Gly His Trp Trp Asn Phe Ile Asp Thr Ser Gln Trp Pro Gln	
325 330 335	
gac aag tat cgc ttg cag ggc atc atg gcc aag tgg gac agc atc gtc	1056
Asp Lys Tyr Arg Leu Gln Gly Ile Met Ala Lys Trp Asp Ser Ile Val	
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Asn Arg Gln Gly Leu Lys Val Ala Val Ile Val Asn Asp Met Ser Glu
 35 40 45

Val Asn Ile Asp Ala Ala Gln Val Gln Arg Asp Val Ala Leu Tyr Arg
 50 55 60

Gly Gln Asp Glu Leu Ile Glu Met Ser Asn Gly Cys Ile Cys Cys Thr
 65 70 75 80
 Leu Arg Ala Asp Leu Leu Glu Gln Ile Ser Ala Leu Ala Arg Gln Gln
 85 90 95

Arg Phe Asp Tyr Leu Leu Ile Glu Ser Thr Gly Ile Ser Glu Pro Met
 100 105 110

Pro Val Ala Glu Thr Phe Ala Phe Leu Asp Ala Asn Gly Phe Ser Leu
 115 120 125

Ser Glu Leu Ala Arg Leu Asp Thr Leu Val Thr Val Val Asp Ala Ser
 130 135 140

Gln Phe Met Ala Met Leu Asp Ser Pro Glu Thr Val Ala Arg Ala Asp
 145 150 155 160

Val Thr Thr Asp Asp Ser Arg Arg Pro Leu Ala Asp Leu Leu Ile Glu
 165 170 175

Gln Val Glu Tyr Ala Asn Val Ile Leu Val Asn Lys Arg Asp Leu Val
 180 185 190

Asp Glu Ala Gln Tyr Gln Ala Leu Gln Ala Val Leu Ala Gly Leu Asn
 195 200 205

Pro Gly Ala Gln Ile Leu Pro Met Val Ala Gly Asn Val Ala Leu Ser
 210 215 220

Ser Val Leu Gly Thr Gln Leu Phe Asp Leu Pro Ser Leu Ala Ala Ala
 225 230 235 240

Pro Gly Trp Met Lys Gln Met Asp Ala His Asp Thr Pro Ala Gly Glu
 245 250 255

Ser Gln Thr Tyr Gly Val Thr Ser Trp Val Tyr Arg Ala Arg Ala Pro

260	265	270	
Phe His Pro Gln Arg Leu Leu Asp	Phe Leu Ala Arg Pro Trp Arg Asp		
275	280	285	
Gly Arg Leu Leu Arg Ser Lys Gly Tyr Phe Trp Leu Ala Ser Arg His			
290	295	300	
Arg Glu Ile Gly Leu Leu Val His Ser Gly Gln Gln Phe Gln Trp Asp			
305	310	315	320
Tyr Val Gly His Trp Trp Asn Phe Ile Asp Thr Ser Gln Trp Pro Gln			
	325	330	335
Asp Lys Tyr Arg Leu Gln Gly Ile Met Ala Lys Trp Asp Ser Ile Val			
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Gly Asp Cys Arg Gln Glu Leu Lys Ser Leu			
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20